

Tape # 17 Dr. Michael and Don Schanche  
Houston, 9/10-11/72

SCHANCHE: What we'd like to do today, if we can, is well first, some personal statistics---how tall are you and how much do you weigh?

LEO DUROCHER: 6'2"-----6'1 1/2", about 208, anywhere from 205 to 210.

SCHANCHE: Just that little bit, you don't have a weight problem?

DUROCHER: No.

SCHANCHE: How old are you now?

DUROCHER: Sixty.

SCHANCHE: Sixty years old even. When was your birthday?

DUROCHER: December 1.

SCHANCHE: Sort of describe what to you is a typical day to me, starting with when you get up in the morning. Are you an early riser or.....

DUROCHER: Well, not particularly, no. We don't ...we usually don't get to bed til 1:00 or 1:30 and get up around nine.

SCHANCHE: Do you wake up quick? Or do you like to take it slow?

DUROCHER: No, I usually wake up and get out of bed and that's about it.

SCHANCHE: Now are you a big breakfaster? Do you....

DUROCHER: Yeah, I usually eat a pretty good breakfast.

Depends on where I am, you know, on the road when there's nothing else to do, I sometimes sleep a little later. I stay up a little later and watch the late movie on TV or something, as long as there's anything on, because it's a little hard to go to sleep after a game and I usually enjoy it if there's anything half way decent on. I watch TV freely. Then get up a little later.

SCHANCHE: Yeah, but when you're here you get about....

DUROCHER: I would say I average getting up maybe an hour earlier because three days a week when I'm here, Monday and Tuesday the gun club is not open, on Wednesday, Thursday, Friday and sometimes on Saturday I go to the gun club and that is one place that I can get baseball off my mind and go out there and relax, there are pretty good fellas out there and we sit around and shoot a round or two and drink coffee and agitate and shoot the shit.

SCHANKE: Try and talk about guns? Or do you talk baseball?

DUROCHER: No, there 's not too much baseball talk out there, there's some, of course, they're all fans, but of course, the gun club doesn't open til 1:00 o'clock. That way I can be out there in twenty minutes from here, from the house. Get out there about twelve thirty, there's a little restaurant and coffee shop there and we have our second cup of coffee out there and starting shooting at 1:00 and I usually leave out there no later than 3:00. See, we're out there two hours.

SCHANKE: How many birds will you shoot in a.....

DUROCHER: Oh, usually anywhere from fifty to a hundred, that's two, or three, four rounds.

SCHANKE: Well, I hear you're very good.

DUROCHER: No, I'd....

SCHANKE: Do you compete?

DUROCHER: No, only just once in a while, for a little trophy or something. They have some meets---they have a meet every year over at Middletown Gun Club.

SCHANCHE: Well, what have we missed?

DR. DeBAKEY: Well, we've missed some details and some more precise descriptions of certain things. That's going to take some time, because I've got to get that out, more specifically and send you that.

SCHANCHE: Right. Well, we haven't touched on your left ventricle pump.

DR. DeBAKEY: Artificial heart, left ventricle bypass pump, and the....

SCHANCHE: Valves.

DR. DeBAKEY: Yeah, that's right. And we haven't touched on transplantation, heart transplantation. That, I think, needs to be described and told about and I think this is something we're going to have to sort of decide about, too, with the story of the artificial heart.

SCHANCHE: We've got to ....you know, pretty thorough in that one.

DR. DeBAKEY: Well, yes.....

SCHANCHE: And also in the transplants.

DR. DeBAKEY: Yeah, I've got all of the documentation for that in one place, I've kept it for that very reason.

SCHANKE: Where is it?

DR. DeBAKEY: I can get it out for you.

SCHANKE: Why don't you?

DR. DeBAKEY: I can get the whole thing out for you. Maybe you can go over that tomorrow. Incidentally, what day do you want to try.....

SCHANKE: You told me you'd be here until the 16th. Right? I was planning to stay until you go.

DR. DeBAKEY: Well, I've changed....that trip has been canceled.  
(PAUSE)

DR. DeBAKEY: .....recording the conversation, because I don't think she would believe it. It's hard to believe.

SCHANKE: After Liotta had.....

DR. DeBAKEY: Yeah, yeah. It's hard to believe what this man said.

SCHANKE: What did he say?

DR. DeBAKEY: Well, it's hard to understand that a rational person could say the things he said. When I asked him

DR. DeBAKEY: specifically why did you do this and what was his purpose and how could he have really recommended, because I said, you know, it's obvious to me Dr. Cooley didn't really know what had transpired in the animal experiment work. How could you have misled him to believe that the artificial heart could do this? And things of that sort. Well, his reaction was that it was time to apply it in human beings, that it would be a tremendous value to the whole field, to public reaction, to support the research. And I said, how can you believe that? Well, he said, these people are going to die anyway, why not just have one in every surgical....have one in the operating room. If a patient died in the operating room, he'd just put him on the artificial heart. And I said, well, what would you do? Extend his death further? You can't save him with the artificial heart, what would you do?

DR. DeBAKEY: Oh, he said, well, if he lives....if you can keep him going three or four days, in the meantime you could do a lot of research on him. I said what research would you do on him that you couldn't do on an animal? What kind of mind is this?

SCHANKE: He hadn't shown these qualities to you before he did this thing, had he?

DR. DeBAKEY: Well, the only qualities he'd shown to me up to that time were the qualities of sort of confusion. He was a very imprecise and confused about the data he'd given you and I'd go back and say well this data doesn't make sense, you don't have it all here. You said four of the calves survived, but here in another place in this data, you said you only did three experiments. How could four survive and you only did three?

SCHANKE: Didn't cut the fourth one/.....

DR. DeBAKEY: Or he would say that three of the animals.....  
(PHONE)

DR. DeBAKEY: .....more detail, because, you know, it interests me

DR. DeBAKEY: this ---it's sort of a fascinating, it's really a fascinating study of certain aspects of human nature including particularly Dr. Cooley. You'll have to get, now that's one thing I have to check and see if I have, I don't know whether I have all the newspaper files, but that's easy enough. You can go...you can dig those out. But some of the things he said in the newspapers afterwards, it's really fascinating in that sense, it's a study of, well, almost a meglomania type of reaction.

SCHANKE: In what .....greed, isn't it.

DR. DeBAKEY: Well, I don't know, it's some greed, yes, I would say some greed, but some ambition, seeking the plaudit, so to speak, of ....you can't find any other way. You know, people confuse two things very often. People confuse, let's say publicity or public recognition, whether it be good or bad, public recognition, with what I term is well-deserved respect of your peers. Now, you can get the respect of your peers only by having them respect what you do. What you've accomplished. You can't demand it, you



DR. DeBAKEY: can't get it any other way. Even when you play politics, so to speak, by working in organizations until you move up the ladder and get to be the secretary and the vice president and the president, there is nothing more forgotten than the ex-president of an organization. Now, for some people this is a substitute for fame and it gives them a gratification, but there is no real substitute for it except in what you yourself know honestly you have accomplished in getting the respect of your peers. Dr. Cooley never has had it. Basically, this is because he's never been an innovative person, he's never achieved anything that is innovative or that is based on new developments. Whatever he achieved really came by working with me and having his name associated with me in the papers that we wrote. Well, I had to write virtually every single paper. Now, as I've done with many of my young people, in order to give them enough credit to get them in organizations, I've written the papers for them, they're my patients,

DR. DeBAKEY: they're my operations, my cases, but then I put their name as senior author, but I do this with every one of them. I've done this to move them ahead. This is how you do it. It doesn't matter to me. I've got nearly 900 publications, what do I need another one as a senior author doesn't matter. And most of the people, frankly, who read these things know who did the work, even though my name is the last author. So that doesn't..... you cannot hide or in any way distort and mismanage your work so that it can be respected. It is going to have to be honest work over a long period of time. You might fool people for a while, but you can't fool them long. Cooley chafed under this. There's no question about that. People used to say that to me and I used to disregard it. He wanted fame, but he didn't have really what it took to get real fame. He's never been recognized by any scientific community in medicine.

SCHANKE: Well, the tragedy with him isn't it that he did and

SCHANCHE: still does have a great deal of respect for his technical skill.

DR.DeBAKEY: Well, I would say that this highly exaggerated.

SCHANCHE: Really?

DR.DeBAKEY: You see technical skill in terms of getting an operation done let's say in fifty minutes instead of an hour and ten minutes can be very misleading, because you can cut corners and get away with it in, say, instead of getting good results in ninety five percent, you get them in ninety percent, most people wouldn't know the difference. But there are I would say half a dozen surgeons up there who are working with me and I'll make you a bet not a single one of them would go to Dr. Cooley to be operated on. Why? They know. They've worked with him and they know that basically once he has done an operation he's through. Secondly, that he is not precise and careful in carrying out the work beforehand. As a consequence he makes all kinds of errors.

SCHANCHE: Someone told me up in the operating room one day that where you made this very complex interrupted stitch in the valve operation, he does a continuance stitch which doesn't hold as well.

DR. DeBAKEY: That's right, there's an example.

SCHANCHE: It's quicker.

DR. DeBAKEY: Yeah, it's quicker. Well, for the average fellow who doesn't know any better, he might regard this as skillful where it's not. None of my people would do it, because they have learned to be precise and careful and they're perfectionists, he's not. He's superficial and he wants the image, he doesn't care about the rest of it. It's a matter again the same thing I said a moment ago, if you want to really be, and be called a surgeon's surgeon, then you've got to be precise and perfect. That is not to say you mustn't be adept. You have to be that, too. But you can be both. And that's what makes the big difference and there aren't many like that. But he can't, for example, he can't move his

DR. DeBAKEY:     fingers any faster , in fact not as fast as some of the people in my area. In my operation rooms upstairs, you know, he can't tie a knot any faster, he can't cut any faster, I mean that's , those are basic principles, he can't sew any faster, his movements are no better, he's no better coordinated. Then it has to be something else. Now his concepts his mental conceptual capability is nowhere near as good as some of my people upstairs. Now the other thing is, look at the people who he has with him. Two of the young people I trained, we almost wouldn't let them complete their training with us it got so bad and everybody was so goddamned glad when one of them left here and he failed the board when he took the board exams. He's over there working for Cooley.

SCHANKE:        Well, this is one of the most intriguing stories in modern medical history , the Cooley-DeBakey story, the artificial heart. Is it true, as all of the press said that Cooley was the apple of your eye and

SCHANCHE: was your favorite?

DR. DeBAKEY: That's not true, no. That's not true. This comes about because of my desire to support all of my young people and I take, the ones I've taken on and kept with me, I kept because they had something to offer. Cooley in those days did have something to offer. He was young, he was, let's say, ambitious, he was a hard worker. He had certainly better than average technical capability and he was very energetic. These are qualities I like about people. I didn't know he was dishonest.

SCHANCHE: When did you accept him?

DR. DeBAKEY: I didn't. Oh, I got him about '51, '52. Now it's a very interesting thing. These are things that I never fully appreciated. But none of his colleagues trusted him. Not a single man that works with me or worked with me previously trusted him.

SCHANCHE: How did you discover that?

DR. DeBAKEY: Later. Much later. I was the last to get the message.

DR. DeBAKEY: He did things that were kind of sneaky and they caught on, but I didn't, because I never looked for things like that and I don't see things like that. Naturally as the head they hide those things from you, too. I'm too busy to be concerned with them. I favored all my young people. Dr. Oscar Creech, the first one that came with me, I pushed him hard. I gave him things to do, I wrote papers for him, got his name...got him into the organizations, talked about him, what a fine young man he was, and finally got him to get the cha...I was the one that got the chair for him. They wanted me to take the chair at Tulane. To go back to Tulane. The President came to see me, and I finally decided .....it was an emotional period for me because I had such a great feeling for Tulane. All my education had been there, all my brothers and sisters had been there and got there education at Tulane. Tulane had been good to me and my family. I feel very keenly about supporting Tulane, so my

DR. DeBAKEY: wife and I talked about it at some length as to whether we would go back to New Orleans to live. We loved New Orleans and had so many friends there, and finally decided against it, because I had so much invested here, building it and so on. I felt they needed me more, the school needed me more. So I recommended Dr. Oscar Creech and they took him. Dr. Crawford the same way. Pushed him hard, gave him things to do, gave him certain areas of interest, and supported him. But they all were the apple of my eye, so to speak, every one that came along.

SCHANKE: The ones that survived.

DR. DeBAKEY: Yeah. That's right and made good. And I'm proud of them.

SCHANKE: How long did Cooley actually work as your associate?

DR. DeBAKEY: Oh, I suppose maybe ten years.

SCHANKE: Counting his residency?

DR. DeBAKEY: Yes.

SCHANKE: When did you first become aware of his restlessness and his desire to become a star?



DR. DeBAKEY: Well, I didn't really become aware of that. He was anxious to have his own service and I encouraged him to develop it and when St. Luke's became....opened up, I didn't want to get over there. I had more than I could do and I encouraged him to try to use it. I used to go over there some, but it got too burdensome for me to run around. I wanted to concentrate my work here. So I encouraged him to do this and tried to encourage some of the others to go there. It's typical, they wanted to stay with me, they didn't want to go over there with him. I tried to say to them, look, go over there and work over there, you don't have to work with him, and they ....no, I want to work here with you. They felt more comfortable with me. And so they stayed here with me, they wouldn't go over there. See I wanted more of them to work over there and to take advantage of another available bed service because I knew I was pressing this hospital tremendously.

DR. DeBAKEY: You saw where I showed you those figures. Here I am running a hundred to hundred and fifty patients all the time. This pushes the hospital. I'm being criticized by the other people for taking up all the beds.

SCHANKE: Was he hungry for academic rank, too?

DR. DeBAKEY: No, I'll tell you, he never was really an academician. I recognized that early because he wouldn't work in the research laboratories, he didn't want to do much teaching and I would get the impression that the students and residents didn't care to be associated with him very much, because he didn't give them much time. Secondly, he was constantly seeking ways and means of expanding his income. He chased under the restrictions that I had on income. Not restrictions, but restrictions in the sense that you applied most of it back into the school and the department. I thought he was making plenty of money, but he wanted to make more and he wanted to invest it and he wanted to be in a bank, the director of a

DR. DeBAKEY: bank and he wanted a ....one of those big land developments. He wanted to be in business, he wanted to be wealthy. And I quickly learned that about him, but I felt that was his business. It didn't bother me. This is just a part of his makeup. You know, people are made differently. I recognize that. But this...this whole artificial heart program brought out an aspect of his character which I must say I didn't really suspect . I never suspected he would be dishonest, not so much with me, but dishonest in dealing with the patients, because if he didn't know for a fact what the artificial heart could do, on the basis of experimental work, then that's worst than dishonesty. That's inexcusable ignorance. And if he did know, then that is absolutely dishonest.

SCHANKE : Well, didn't he try to claim that he had been doing research with.....

DR. DeBAKEY: Yeah, well, you see, that's even more dishonest. Of course, everybody knows that he never did any

DR. DeBAKEY: research at all. Never did, much less on the artificial heart. And then to cook up this scheme secretly with Dr. Liotta simply shows to me that not only was he dishonest, but he was being stupid. To become associated with a man who really was stupid. This fellow was absolutely stupid.

SCHANKE: Do you think Liotta was a little unbalanced?

DR. DeBAKEY: Oh, yes. No question about it. I didn't know how unbalanced he was, but Dr. Hall, who was, under whom he worked because Dr. Hall was the director, I made him the director of the program, and a pretty good boy, there was hardly a week go by when he didn't come to me and say, I've just got to get rid of Liotta, I can't work with the bastard. He'd call him that stupid son of a bitch, he said, I just can't work with him any longer. And I felt so sorry for him then, because he had no place to go. He had a family, he had no place to go. He was dependent on this salary to live. I used to try and say, well, try to overcome. Remember you've

DR. DeBAKEY: got to have a technician to do some of this work. You can't do it all and you can't have somebody, you'd have to have a technical assistant of some kind to do these experiments. But he said, he won't do what I tell him. He comes in and he's got, he thinks he's got ideas and they're stupid ideas. This is unbelievable.

SCHANKE: Was there any real hostility between you and Cooley before this happened?

DR. DeBAKEY: Well, if there was, I didn't know it, Don. I never carried hostility in a sense against anyone, largely because, now, I've gotten mad at people, you've seen me get mad. But that....I'm not hostile. Within an hour or so, I've forgotten that I even, and occasionally people will say something to me and I said no I didn't do that to him, did I. They say, yes, you did, you called him stupid, and I said, well, I'm sorry I didn't mean it that way. I said what he did may have been stupid, yes, ....

DR. DeBAKEY: Well, you see, I don't really want to hurt anybody and actually I get to feeling bad if I take somebody to task about something afterwards. So I had no hostility to Cooley and I never felt he did anything to me.

SCHANKE: You didn't feel any sense of rivalry developing between you two.

DR. DeBAKEY: Well, when you say rivalry, you see, I think it's important for you to understand that competition is going on with my young associates up there all the time. They're competing with me all the time. Because they're competing with me for patients and actually they'll almost steal patients, when I say steal I don't mean in a bad sense, but what happens is that a doctor will call here and I'm nothere. They'll say well, is one of his associates in. Yes, Dr. Crawford's here, Dr. Morris is here. Well, put me on to him. They'll never tell me about this. They'll go on and accept the case and go ahead and do it and not say anything about it.

DR. DeBAKEY: I frequently am put into a little bit of an embarrassing position because the patient comes thinking they're going to see me and he ..... you know, then they hear I'm around and say why hasn't Dr. DeBakey come to see me.

Well, that doesn't bother me really and I over-look that because these, they're aggressive, energetic, good people and they're benefiting to some extent from being associated with me by getting this material. Well, they're doing good work, they're really helping me. Take the load.

SCHANKE: You've got all you can do.

DR. DeBAKEY: Yeah, so it doesn't bother me. Never has. Now I don't pay too much attention to it. Well, Cooley did that all the time, but I never paid any attention to that, really. The same way. Never felt any hostility to him and I never felt he was hostile to me. Now subsequently I learned that he did make some snide hostile remarks to some visiting doctors sometimes, to the residents and so on.

DR. DeBAKEY: They never told me about this until later.

A few of them resented it and they said something to him about it. Well, all I can say about that is that he didn't hurt me by doing it. In some respects he was demeaning himself to say things like that. So I again would pay no attention to that.

I never felt any kind of rivalry in the true sense of the word, let's say, hostile kind of attitude. Certainly when he was with me, up until that happened, he was very cordial and friendly, and as a matter of fact there was a young man in the department who worked with him right up nearly to the time including the artificial heart and finally left shortly after that, that I ....came from Hopkins, and I took him on because Cooley recommended him. We put him into the department on a full time basis and used to go over there and worked over at the Ben Taub. And I didn't realize until Cooley himself came to see me and said we're going to have to get rid of that fella. And I



DR.DeBAKEY: said well, what's the matter. I didn't know anything was going on. Well, then all my associates..... I started asking all my associates what about this boy. They'd say well he's terrible. He just doesn't know how to do anything. It was shortly before that that Cooley came to me and said you're going have to get rid of him. I said, well, do what ya'll want, if you want to get rid of him, well, tell him to go. By God, he participated in the artificial heart with him. It's extraordinary to me.

SCHANKE: What were your relations with him as a faculty member at Baylor?

DR.DeBAKEY: Well, that's what I say.....

SCHANKE: You relatively indifferent.....he was relatively indifferent to faculty responsibility.

DR.DeBAKEY: Oh, yes, always was. He never paid any attention to his faculty responsibilities at all. I used to try and encourage him to come to meetings and try to participate more in the schools activities. He just disregarded it. He had no academic interest.

DR. DeBAKEY: That's the truth of it. But he's not alone in that respect, I must say that. There are quite a few others who are like that too. So I never paid much attention to that either.

SCHANCHE: To a person like that, what good is the.....other than economically or socially, what good is the school affiliation?

DR. DeBAKEY: Well, it's a kind of veneer of prestige in any profession. Doesn't really mean basically anything. But he could put it after his name, on his papers. When he goes to foreign countries, he can be called a professor.

SCHANCHE: Have you talked to him at all since.....

DR. DeBAKEY: No. I cut him off after that completely. I'll show you the letters he wrote me. He tried his best to come see me. He wrote me a very pleading letter. I refused to answer any of his calls. I just cut him off. There was nothing to be gained, Don, by my talking to him. What he did as far as I'm concerned, is unforgivable. I saw no reason to

DR. DeBAKEY: do anything. I felt that the best way for me to deal with him, first let me say that I cut myself off from the whole issue, because I immediately went to the chairman of the board of trustees and I said, I as president of the college, don't want to have anything to do with what's going on here. I think it's important for you to appoint a faculty committee and if you want a board committee to investigate this. The school had been put in a very bad position by what had been done. The National Institutes of Health had, we had sixteen million dollars of research money from the National Institute of Health without which the school couldn't run. This is all in jeopardy now because the school had committed itself to certain ethical guidelines in research on human beings. This was a violation of those guidelines. To be sure the school wasn't at fault in the violations, but a faculty member has violated it, and has indicated that as far as he's

DR. DeBAKEY: concerned he would not have to do this either. He doesn't have to. He said in the paper when they asked him about the guidelines and he said well, what guidelines and he said I have my own guidelines.

SCHANKE: Didn't he also claim some technicality that this wasn't NIH money in the artificial heart, it was state money.....

DR. DeBAKEY: Yeah, and it was, again, an absolute lie. And he knew it was a lie, because Liotta stole the thing one night, put it in his briefcase and took it over there, and he knew that. He knew that. Then to make matters even worse and show how dishonest he tried to purchase the cows, the experimental animals, after all the experiments had been done.. He sent the treasurer a note saying that he would be responsible for the cost of those cows.

SCHANKE: So that he would have some record of responsibility for the research?

DR. DeBAKEY: Yeah. For the animals.

SCHANCHE: Sort of like a banker does, covering his tracks.

DR. DeBAKEY: Yeah. He even, he provided evidence for his dishonesty. Amazing, this is what's amazing about it. I think it was really.....there were several doctors here who told me, who were associated with him over there, told me at that period, they felt he was absolutely irrational. Acting in a very irrational manner. And he may have been going through an irrational period, I don't know. It's possible. It's hard to account for what he did as a rational human being.

SCHANCHE: You mentioned to me once that he performed an animal transplant...animal heart transplant on a human being prior to the artificial heart.....

DR. DeBAKEY: That's right. What he did was take a ram's heart, he took a ram and transplanted this ram's heart into this human being. Now anyone, this shows you how either, again, either ignorance or it's a

DR. DeBAKEY: disregarding of the facts. Neither one of which you can excuse. Any freshman in the experimental laboratory, including the students there this summer, know that there is considerable differences in the size of the red blood corpuscles of different animals. Now the sheep is extraordinary in this regard. He has very small, less than half the size of a human red blood corpuscles. What happens is that the capillary network is built for that size corpuscles. If you put a human corpuscle into the capillaries of a ram or a sheep, it'll block it, it's too big to go through. It's like blocking the circulation. So there wasn't a chance for this heart to be circulated with human blood. Couldn't possibly work.

SCHANKE: How could a man in that position do such a thing?

DR. DeBAKEY: Well, I asked the same question.....

SCHANKE: Surrounded by other people with a medical education.

DR. DeBAKEY: That's what I'm saying, I can't explain it. I can only ask the same question you've asked. How can this be possible.

SCHANKE: Didn't somebody tell him? .....SOME other student.....

DR. DeBAKEY: Well, I'll tell very frankly, again, the same thing I said a moment ago, the people who surround him, or work around him, are just as stupid. That's the truth of the matter. You wouldn't get a single individual up here that could do that and they all laughed about it, they thought it was a huge joke, the people up here, they just couldn't believe it. It came out in the morning paper, as I said, right there, the picture of a sheep....it was funny really in a way.

SCHANKE: Well, I notice very briefly....very recently he was acquitted or whatever the term is in the civil suit

DR. DeBAKEY: Well, the judge, yes, it never went.....

SCHANKE: Basically because you weren't subpoenaed and you .....your people wouldn't testify without subpoenas, is that right?

DR. DeBAKEY: Well, I don't know. Basically because I wanted to have

DR. DeBAKEY: nothing to do with it. Again, I'm trying to avoid even contaminating myself with the whole business. So I took the position that I didn't know anything about the case. Well, this lawyer who, it was quite apparent to me that he was really stupid, came out and took the deposition.

SCHANKE: This was the plaintiffs....

DR. DeBAKEY: Yeah, with our lawyers. So I talked to our lawyers, lawyers for the medical school, not his lawyers, and I talked to our lawyers and they told me, they said look this fellas stupid, you don't have to worry about it. And I think we can handle it so that you will have very little to do with it. And besides we think we can prevail upon the judge who is very sort of pro-Cooley and pro-the lawyers for Cooley and so on. And besides this judge didn't like the lawyer. He was a kind of a second rate shyster in a way. So, he came down here, he was quite a character. He didn't know his ass from a hole in the ground or how to handle this case. So that's one thing.



DR. DeBAKEY: Secondly, he made his whole plea on the wrong basis. Thirdly, he didn't make the effort to get a doctor to testify. Well, it's very easy to get a doctor to testify. There are professional doctors who do nothing but this, they go round the country testifying. He didn't make any effort to get one. Apparently built his whole case on the idea that he was going to get me to testify. That was stupid because he should have gotten that message when he came and got the deposition. I refused to say anything about the case, because I said, I don't know anything about the case. Well, I didn't want to be contaminated with it in any way. So.....

SCHANKE: It sounds to me like you saved Cooley's ass by not being contaminated....

DR. DeBAKEY: Well, that wasn't the purpose of my not wanting to be contaminated. I was trying to save myself from having any relationship with it. The thing is that in the sense it distresses me that I am related to the thing and brought into because it was my artificial heart, that's all. I had nothing else to do with it and

DR. DeBAKEY:

I don't want to have anything to do with it.

It's so....I regard the whole episode as so undignified and so , the whole activitiei so contemptuous from my standpoint that it repulses, it is repulsive to me, to be associated with it in any way. My only regret is that my name is in any way associated with the whole deal.

I can't disassociate myself from the fact that it was my artificial heart and my heart program.

But that's all, and I want to make it clear that that's all my relationship with it. So that's why I didn't want to go down there and get involved and testify and all that sort of thing and have it all in the papers. They'd sucker me, you can be sure, that the papers, the news media would exaggerate my role. That I was out to get him.

I could care less, I don't care what happens to him.

As far as I'm concerned he's like the Russians

I consider him a non-person. In that category -----

I find that delightful. Dealing with an unpleasant

DR. DeBAKEY: person or an unpleasant problem just consider them a non-person.

SCHANKE: When he was dropped from the faculty, I understand, uncensured, he was censured by the local .... Normally aren't these enough to drive a man up to the hills someplace?

DR. DeBAKEY: This happens all the time....this is why I said to you earlier...once before, that the medical profession doesn't and cannot police its own. They just won't do it. You've got to commit murder or rape....and then, of course, it's not the doctors that do it, they do it after society has taken care of it.

SCHANKE: You've got to get tried and convicted first.

DR. DeBAKEY: That's right, then they'll take him off the roles.

SCHANKE: Well, that puzzles me. The layman, it puzzles me when.....

DR. DeBAKEY: Sure it does, but that's the way it is. That's the way society has to do it.

SCHANKE: Did Liotta go back to Argentina?

DR. DeBAKEY: Cooley hired him for a while and he made a great to-do about how he had this big program he was going to have over there on the artificial heart. He was going to put one in, he constantly threatened, you know. He had the newsmen alerted to the fact that he was going to put another one in almost any day. But he didn't have one to put in, you see, unfortunately. The only one that Liotta took was that one. So there wasn't anybody who could make them for them anymore, including Liotta. You see, our girls and the technicians in the shop made them. So after awhile, I think he, I got this from other people who found out about it, that he began to realize that Liotta was pretty stupid and he couldn't do anything right. First, he tried to make an assistant out of him, but he couldn't sew an incision. Then they put him up in the cath lab and he couldn't do that. Everything he did went sour, so I think he finally got rid of him. Well, for awhile I heard he was

DR. DeBAKEY: practicing in some little hospital out.....and  
the next thing I heard was that he went back to  
Argentina, but whether that's true or not I don't  
know. I really don't know.

SCHANKE: Well, listen, I'd like to see the files on all of  
this.....

DR. DeBAKEY: Yeah, I'll get it.

SCHANKE: I think we can just stay off of that subject until.....

DR. DeBAKEY: That's right.

SCHANKE: I'd like to talk about your personal life. Now,  
if you're ready to do that. If you're not, we can  
save it for another night.

DR. DeBAKEY: Well, I don't know how much.....

SCHANKE: I mean your family life and that sort of thing.

DR. DeBAKEY: Well, you know, I was born in Lake Charles.  
Grew up there....

SCHANKE: Well, of course, we've gone through all of that.  
I mean your marriage, your children.....

DR. DeBAKEY: Well, as far as my marriage is concerned, I met  
my wife in New Orleans when she was doing some

DR. DeBAKEY: graduate work in nursing. Some special work, and she was working part time at Tulane and that's where I first met her. We started going together. Then she went to .....

SCHANKE: Were you a student then, or an intern or a resident?

DR. DeBAKEY: I was an intern, actually.....no, I was beyond that stage, I was actually a resident and I was....I had started to work at Tulane as an instructor. I was teaching as well as doing my residency work. Then she went to Paris to take on a year of work at the American University Hosp....I mean, American Hospital in Paris, and at the same time, about that same time, I, not at exactly the same time, but.....

SCHANKE: She went before you.....

DR. DeBAKEY: She went before I did, that's right. Then I went on to Leriche. I went....would occasionally visit her, oh, I guess I made about two or three trips to Paris. Certain holidays would come along and I'd get three or four days, so I'd go to Paris and visit with her there.

SCHANKE: Were you serious about each other then, or were you still just.....

DR. DeBAKEY: Yeah, I guess, well, reasonably so, I would say, yeah. Then we became more serious about it and fell in love with each other and then when we came ..... when we both got back, we decided to get married. Then we got married in her father's home and then we came back to New Orleans and I, of course, went back to work.

SCHANKE: What did her father do?

DR. DeBAKEY: He was an engineer on the railroad, for one of the railroads, I've forgotten now which one it was. Her mother's family were all from Louisiana, South Louisiana. Around Houma. Then, well, we had, our first boy was born in New Orleans and then the war came along and I went to war. We went, then she came to Washington.

SCHANKE: He was born in about 1941 or '42, just prior to the was.....How old is he now? He's thirty.....

DR. DeBAKEY: He's about thirty, or so. We had no children

DR. DeBAKEY: until the end of the war.

SCHANKE: How long was it after you went to Washington before she and the baby joined you? You told me finding the old basement apartment, so this was a period when you were living alone.

DR. DeBAKEY: Well, yes. It was a few months. A few months before I could find a place for us....to bring them. It was really hard to find any place to live in Washington and I was lucky to get this place that .....in Virginia. Then the other children came along....the three boys came along fairly rapidly once the second boy was born. That was six or seven years after the first one was born. Then the others came along one and a half or two years following each other. The last boy was born here. We were moving, moving around so much. Diana, of course, you already have a little report about her activity and so on. She was a good mother, took care of the children, she was wonderful with the children. She devoted all of her time virtually



DR. DeBAKEY: to taking care of the children and being a chauffeur. At that age, that's what you do or a good deal of it. She was very, you know, compatible with me. She recognized that I was devoted a great deal of time to my work and she didn't put any pressures on me to do a lot of socializing and didn't make any great to-do over disappointments in that regard. She really was very simple in her needs. I mean, she also had gratification with the children, taking care of the house. She never required a lot of servants, she was pretty efficient about the way she handled the house. She took good care, she was a good housekeeper. She had simple tastes, but really highly dignified tastes, almost elegant tastes. As far as my tastes is concerned. You've seen the house and it's very warm and comfortable. There's not a lot in the house that's highly valuable, but that's the way she kept the house.

SCHANKE: Your house is more a reflection of her personality than yours.

DR. DeBAKEY: Yes, exactly.

DR. DeBAKEY: She was very warm with everybody. She had friends everywhere and made friends easily. She was not a catty person. So that we really had, I think, a very happy life when you think of the fact that I didn't devote a great deal of time to it. But she made a lot of trips with me and we had lots of time to be together, because I took her all over the world with me. She was a great traveler, she loved to travel and she loved to meet people. She met them easily and made friends quickly and she made lasting friends. She kept up great correspondence with people all over the world. So that she liked to go with me, and I liked to have her, because I enjoyed these opportunities when we could be together a great deal. She loved to travel and really we did travel everywhere.

(PHONE)

She was a great really help to me in that regard, too. Because I could use her in various ways to....in getting

DR. DeBAKEY: out of things gracefully. She cooperated with me in this matter, too. We did have many opportunities to be together and I have many happy memories of these trips that we made together.

SCHANKE: You're one of the few men I've ever known who literally makes his life his work. You live it all your waking hours.

DR. DeBAKEY: Well, yes, but you see, Don, my work is so really enjoyable, for me. It's hard for me to find something else to do that is equally enjoyable. So that it's very easy for me to live this kind of life because I find it more gratifying. I've done many things, tried many things, you know, so that I have....I know something about other things to do. I virtually have chosen among these different things what I do, really. As a consequence these other things don't appeal to me very much. You know, I've hunted and fished and had a few little hobbies, played in music and that sort of thing. They don't give me as much gratification as doing what I do, so I don't play golf

DR. DeBAKEY: because I found out years ago that I'd get out on the golf course, and I enjoyed it, being with my friends, I was thinking of some of the things I could be doing or of the time I could spend going over a paper, so I just gave up golf.

Didn't do enough for me to be worth my while

SCHANKE: Diana said you never took a single day's vacation in your life, not even a day off.

DR. DeBAKEY: No, but you see, Don, I see no reason to, let's say take a formal vacation, as a consequence, I've not taken vacations. They tell the story, which is true, as a matter of fact, some of my residents like to tell the story about one of the residents in the early days, going back now to around '59 or '60, he'd gone to war, Korean War, and he...when he came back, shortly after he came back, he was doing quite a bit of work on materials he'd gathered and then around April, May, or something like that, he came to see me and he wanted to know when he might take his vacation. He said I just wanted to

DR. DeBAKEY: get some idea of the schedule of vacations for the purpose of scheduling mine when it would be the least inconvenient for you. I said, well, John, that's very nice of you and I appreciate the thoughtfulness, but I said, you know, this question never has come up. So I really don't know and the truth of the matter is, it hasn't, because I've never set a pattern of vacations, I don't take one myself, I don't really expect anybody else to take one, if they want to take off sometime, they are free to do so, of course. So the question never really arose. But I don't see any really need for me take off some time as a vacation. When I do a great deal of traveling and in a sense this is a sort of different kind of activity, even though it's associated with my medical work, because I'm giving lectures and demonstrations, that's enough.

SCHANKE: A sufficient change of pace.

DR. DeBAKEY: Well, I have so many varied activities, Don. Patient work as such, just practicing medicine is not my sole activity. I've got research work organizations, research programs, I write papers, I participate in various organizations in the country, national organizations, I have virtually since the war have had a continuous kind of activity in Washington related to medical matters of one kind or another, I've been on study sections on councils, I'm doing some lobbying in Congress, you know, I have a lot of varied activities. So that I'm not just a practicing surgeon. Well, this gives me a wide spectrum of endeavors to participate in and in a sense, broadens my whole existence.

SCHANKE: Did it ever bother you that this deprived your family of their father? Certain high points in your.....

DR. DeBAKEY: Well, I ....no, I didn't really because, Don, I've sort of saw to it that the children got the things they've got. I used to do a little, few things with the children. Not a great deal, I didn't go out

DR. DeBAKEY: camping with them, but I'd take them out from time to time and occasionally we'd take them on a trip with us or something like that. Took Mickey to Paris with us one time, that sort of thing, you know. So that I had a chance to be with them some. I think the best evidence that they respect and love me is ...exists now. Now that their mother is gone, they feel even closer to me. So much so that they're constantly wanting to know what they can do for me. They manifest their love sincerely in ways that I appreciate.

SCHANKE: That was evident the day we had lunch with two of your boys.

DR. DeBAKEY: Yeah. I know they feel very close to me and they are warm with me. I didn't get home yesterday, for example, or the night before because I was tied up here all evening. They, Barry and his wife, Roxie, called me a couple of times yesterday and a couple of times today and they are a little worried about the fact that I'm putting in some

DR. DeBAKEY: ....so much time. Barry said, "Now, Dad, I really think you ought to get in tonight and get some sleep." You need some rest, I know that you can do it, but still I just would feel better if you would get some sleep." Well, it's just little things like that that makes me realize they do.....

END OF SIDE A.



Start Side B.

DR. DeBAKEY: ....vascular, cardiovascular. Now, there were a few things that happened during the war in the field of vascular surgery that gave it a great deal of stimulus. Not so far as military stimulus, but civilian. One was that Grosse in Boston and Crawford in Sweden had successfully, finally successfully, operated on a patient with coarctation by resecting it and sewing it together again. It's very interesting, this had been attempted on numerous occasions in the past, and I recall so well assisting Dr. Ochsner on such a case. This...well, actually this was not a case of coarctation, this was a case of patent ductus. This too was one of these things that the successful ligation of a patent ductus, was another sort of milestone in getting things done ...things going in cardiovascular surgery. This case I recall was on a patient that had one other ....one of the complications of this is what we call bacterial endocarditis, that is bacteria get lodged there and produce an infection and

DR. DeBAKEY: then they get a blood stream poisoning really and they die. Well, the operation had been attempted on this by a number of people and they were never successful. We attempted one, and I remember we had a group of surgeons in the audience, there was a meeting there, and I was assisting Dr. Ochsner, and he said to me, now, see if you can get your finger around the other side. He was working on one side of the table and I was assisting on the other, and as I did try to get in around the other side, I felt my fingers go into the aorta and I knew if I got my finger out of there it was going to bleed like hell. I said to him, I said, Dr. Ochsner I think I've torn into the aorta. He said, well, just hold your finger there. So.....

SCHANKE: Daming up the dike.....

DR. DeBAKEY: That's right. So I did and he started putting some sutures around it, to try to get around it. We finally did and we got the patient off the table, but he died

DR. DeBAKEY: later. But subsequently and sometimes during the period about '3----about '41 or '42, '43, I'll have to get for that too, a successful case was done. And then in '44, I think, '43 or '44, Blaylock and Towsey reported a successful application of the pulmonary bypass for a patient with a tetralogy, a shunt, for a patient with tetralogy, a blue baby operation. And that was a great stimulus to get things going in the field.

SCHANKE: Incidentally, how is Crawford.....

DR. DeBAKEY: C R A A F O O R D. Craafoord. So things began to really pick up after the war, because the war had, during the war in addition, missiles injuries, and bullets into the heart were able to be removed successfully and were done successfully by Army surgeons. They were civilians who were in the Army.

SCHANKE: It was rare enough to still be news when they did it.

DR. DeBAKEY: Oh, yes. There was a young man in Boston by the name of Dwight Harkins who was in England in one

DR. DeBAKEY:     our military hospitals and he reported quite a few of these successfully performed. Then at the end of the .....when the war was over with, in '44 or '45, '46 that period, '47, things began to pick up and the concept of entering the heart while the heart was beating and correcting certain things like a mitral valve that was narrowed, stenotic, could be opened, cut open with your finger or even with a little knife on the end of your finger. All kinds of devices to do this. It became successfully. So this operation added another emphasis to the whole field. In the meantime, Grosse in Boston with some of his young people had also shown that you could resect a coarctation and if it was too long and couldn't bring it together, you could put what is called a homograft, an aortic homograft. These were really kind of fresh grafts taken from cadavers and they were working. That was demonstrated. This stimulated people to work on grafts again. You've got to go back fifty years, sixty years

DR. DeBAKEY: and remember that this all was done beginning about 1890 to 1910 there was a very intensive period of experimental work on the use of grafts. All kinds of grafts. Unfortunately these fellows were before their time, because when they started to apply this clinically they got into difficulties. One reason they got into difficulties was that you didn't have all these ancillary methods, like blood transfusions, good anesthesia, antibiotics to prevent infection. Infection was a very serious problem with a graft, it could kill the patient. You didn't have to have too many of those to discourage you. It died out. All the basic principles of sewing grafts and concepts and so on had already been developed. This was then revived again. Now it was being more successfully applied, because you had all these ancillary measures that you could use. In the mean time, angiography came into being. Do's Santos had performed a successful lumbar aortogram, they now were injecting dye into the heart, so that precise diagnosis came into being.

DR. DeBAKEY: This is a key factor in applying precise surgical treatment, precise diagnosis. If you're going to take a gall bladder out, you've got to be precise in the diagnosis before you go in. So the dye test proved to be a precise diagnostic method. It always precedes, or allows the application of some therapeutic measure, like surgery, in a precise way and makes it successful. When I came back to Tulane, I began where I started and was working pretty intensively but I really didn't spend as much time as I should have at that time doing this work because I was also Hoover Commission and I was working for the Army doing consultant work, I was traveling around, in other words, a lot of my Army work and in consequence with the Army, the National Research Council and so on, was still being carried on intensively and I was devoting some time to this.

SCHANKE: You have a relatively long period your life and your surgery was pretty limited.

DR. DeBAKEY: Then in '48 I got this appointment, so I moved here.

DR. DeBAKEY: I began all over here and started in the cardiovascular field again. Began my work here and started, I told you about it, a research laboratory, got that going, got funds from the Army. Started getting grafts, homografts. And we were lucky in that all the post mortems at the Jefferson Davis Hospital were done by my service, in my department. My residents. So that we had plenty of graft material available, because we just took them out of these cadavers. Then we started processing them and preparing them. I've still got some lyophilized, that is dried out grafts, in tubes, glass tubes. We used to put them in sealed glass tubes, under a negative pressure. They were sealed in a vacuum. I've still got some over there. This is from 1952, '51, '52, '53. Twenty years they've been in a sealed vacuum tube. So we began to work during this.. doing this, doing some experiments on dogs, dissecting these, putting them in, studying them, reporting on it. Then we decided to start applying it to our clinical

DR. DeBAKEY: patients. I remember the first case of an aneurysm of the abdominal aorta, we decided that we would do it. Now I began here even in '48 or '49, on an aneurysm of thoracic aorta and actually resected it successfully, but the patient died later. Sometime later, it was three or four months later. So I've never regarded it as very successful. The successful sort of impact came from our resecting aneurysms of the thoracic and abdominal aorta, and replacing with the grafts. You'll see in the letter I gave you where we, where I refer to the first cases of such and such. Now, in 195.....

SCHANKE: Well, this is in 1951, your first.....

DR. DeBAKEY: Now, in 195.....yeah, in November of 1952, November 6, 1952, I did this first case of an aneurysm of an abdominal aorta. Resected it and replaced it with a.....that was the first successful....we thought it was the first one ever done, but we subsequently learned that a man by the name of Charles DuBost in Paris had done one



DR. DeBAKEY, preceding us and we didn't know about it. We later found out about it and included it in our bibliography. He had done one in 1951, the year before we did. But it was, when we reported this, we thought it was the first one, and most of the people in this country thought it was the first one. It was the first one in this country, actually virtually the second one that was done anywhere. Now in the thoracic aorta, there we preceded everybody. And performed the first successfully resections for various types of aneurysms in the thoracic aorta, those about the arch, the ascending, descending and so on. Then began the work on occlusive disease and using the bypass principle. Again, about '50, '51, '52, it all about in that period of time. So once we had successfully established the principle of resecting a diseased segment of an artery and replacing it with a graft, then it was merely a matter of applying it to various kinds of conditions, and then demonstrating that this could be successfully done and we finally

DR. DeBAKEY: demonstrated it in a sense over a period of four or five to six, seven years that you could do this anywhere in the body.

SCHANCHE: Were you pretty apprehensive about this first case?

DR. De BAKEY: Yes, I would say we were a little apprehensive about it. We didn't know, for example, how long we could occlude the aorta without producing serious consequences, we didn't know whether we would need to maintain circulation of the extremities and so on. We were just kind of experimenting in a way on human beings. But, you can justify, you might say, the experiments on the basis that we had demonstrated in dogs you could do it, in animals. We just didn't know whether it could be done in humans. There is no well of telling them whenever you do it the first time in a human being, even though you've demonstrated successfully that you can do it in animals. But we had demonstrated that we could do this in animals and as far as we could tell six months or a year later the animals were perfectly normal. I saw that we simply had to go ahead and do this and...in human beings.

SCHANCHE: How did you approach the patient?

DR. DeBAKEY: Well, we told the patient. We said, look, we don't know whether we can cure you of this condition. We can only tell you that our experience would indicate that we can. We've done this in animals, it works well, you've got a condition that's hopeless otherwise, there's no way to treat it, satisfactorily, effectively, and sooner or later it's going to rupture and then you'll die.

SCHANKE: Can you tell from the size of an aneurysm roughly how long it's going to take it to rupture?

DR. DeBAKEY: No, you can't tell from the size. The only thing you can say is that the larger the size, the greater is the chance of rupture. But we've seen small ones rupture, too. So I remember this fella said to me, well, Doc, what would you do if you were in my position? And I said, I would take the chance, but I said that's me, that's the way I am. I wouldn't want to live knowing that at any I might die suddenly. And he said, Doc, if you think that's what you'd do, I'll do the same thing, I'm with you, let's go.

SCHANCHE: How long did he live, do you recall? Did you follow him?

DR. DeBAKEY: Oh, he lived for years. Yeah, I followed him for a long time. He lived for years. I remember Mr.....what's his name....oh, well, the man that helped me develop the artificial arteries, you remember I told you about him, well, see he had an aneurysm of the abdominal aorta and it was pretty good size and his doctor in California said well, there's only one fella I know of who has had any experience with this and he's just had limited experience.....

SCHANCHE: Oh, he was the industrialist who .....

DR. DeBAKEY: Yeah, he was the pharmacist and industrialist.....

SCHANCHE: Right, you told me that story.

DR. DeBAKEY: Anyway, I remember he was here with his wife and his boys when he arrived and a very intelligent man, she was a very intelligent lady and her name is Marian. Anyway, we talked about what the risks were and he used to tell the story himself. He said well, what are my odds? I said, well, I think he was about

DR. DeBAKEY: the thirtieth or fortieth case I'd done so far.

I said, well, so far we've been pretty successful.

I would say our success rate is about something like close to ninety percent. Well, he said, those are great odds. I'll take those anytime. Well, that's what it's been so far. He said, well, that's good, we'll take those odds. But he said actually I came down here and I had made up my mind I wanted to have it done no matter what the odds were, so I'm ready to go, we're all ready to go. I think that's what you've got to do. You've got to lay it out in terms of what is the alternative. And that's the way we approached all of these conditions.

Now, I remember when I had this first man that I did the endarterectomy on for a carotid artery who had been repeated small strokes. He was a bus driver for a school bus and he'd reached the point where he was having difficulty shifting gears and pressing in the clutch. His foot would give out on him, his leg would give out on him and all of a sudden too.

DR. DeBAKEY: We proposed this operation to him and I told him, I said, you know, I think this is what will help you, but I'm not sure. All that I can tell you is that you've got a block in that artery. You have all the symptoms of a block in that artery, and if I can clean that out for you as I have done elsewhere, we can restore normal circulation and you can be free of it. He agreed to go ahead and said well, I want to get ....I don't want to have this....I don't want to have a stroke if I can avoid it. Well, let's hope that this will prevent it. He went back to driving a school bus and is doing fine. I remember when I operated on him, I looked at this lesion and I said, I und.... I remember saying to the group, you know, I said isn't that a beautiful thing. But is it beautiful in the sense that I was overjoyed in having proven what I had conceived and found it and removed it, and it was beautiful in that sense. Then not in physical beauty. But it shows the joy of success is perhaps

DR. DeBAKEY: the greatest joy of all. Well, as I said a moment ago, this continuously led us to expand the application of these methods to all kinds of cardiovascular lesions. Now, when the heart-lung machine was finally proved to be successful, now just preceding that, let me say, that while we were working in the heart, and actually putting our fingers in, doing things like that, there were lesions within the heart like valves and holes, that were very difficult to deal with. The valves if they could not be opened, you couldn't replace them, there was no substitute. The heart-lung machine had not yet been successfully applied clinically, and there were a lot of people who, I remember going to me, some of the old surgeons, saying that's foolish for John Gibbon to be devoting so many years to something like that. It was a kind of flitting fairy tale, you know, that you couldn't catch, that's the expression, you know.

SCHANKE: Sort of tilting of the windmill.

DR. DeBAKEY: No. Running after a kind of ghost, that doesn't exist.

SCHANKE: Chasing rainbows.

DR. DeBAKEY: Yeah, sort of chasing rainbows in a way. Anyway, I always thought John somehow had the feeling he would be successful. I had a tremendous respect for him. I remember when he did the first case I called him up and congratulated him, I was overjoyed about it, because it was a wonderful thing that he'd done. But in the meantime various other methods were being developed and tried. We tried some of those, too. One was to put the body at a low temperature, called hypothermia. The idea was to reduce the body's need for oxygen by reducing its metabolic needs. Like hibernation. I can recall doing some work in the laboratory when we immersed an animal in ice, chipped ice all around him until he was almost frozen, the temperature would go down to almost zero. Five, six, seven, eight, nine or ten degrees. Their heart would virtually stop.



DR. DeBAKEY: Very, very slow beat, and frequently it would be so slow that you could open and get in, these work ten or fifteen minutes and get out. So this was tried clinically. We, I remember the first patient we operated on for thoracic aneurysm of an extensive type, we immersed him and got him cooled off, and then burned his skin warming him up. We had to do a skin graft on him. Fortunately he got along alright. But it was a messy method and I used to think, well there has to be a better way to do it. Just has to be. So in 19...I think it was '53 or '54, John Gibbon finally successfully applied this thing clinically. Well, that opened the whole field. Immediately everybody started developing their own heart-lung machine. Working on it and we did too. That, of course, opened up a wider scope of activities, because then you could begin to work within the heart and that opened the field of not only correcting these simple defects like a whole, like we did today,

DR. DeBAKEY: atrial septal defect, a whole in the upper chamber, or a ventricular septal defect, but also doing other things including valve replacements. Now the coronary artery, the whole field of coronary artery surgery. It really basically was due to applying various technical principles, most of which had been pretty well established over a long period of time. Nothing new about it. The condition today made possible because of certain ancillary measures that are available to you. You have to give credit to the development of these other measures, you know, like angiography, arteriography, the concept of doing all of this then becomes a very simple one, applying the principles to disease. In, also I've selected some reprints, I want to give you these because I want....I've got to go through them more carefully and select some others, just to be sure that you have the originals. I thought I could get those off to you, rather than give them to you to take because I want to look over them myself a little more carefully. I do have them here.

DR. DeBAKEY: If you want, I'll just let you, if you want to look these over tomorrow sometime. I'll leave them with you and give them back to me, because I need to, they're just samples really they're not the basic ones that I need to give you. They're just a few. Well, I think that in a sense that sketches what we 've done, now we'd have to fill in these areas a little more specifically and give the background of arteriography and angiography and so on more specifically. Dates for these things to show how it flowed along.

SCHANKE: Right. Well, what were the most significant elements of anesthesiology, after the war....

DR. DeBAKEY: No question about it. Anesthesiology is very important. It still is and still is the greatest threat, the greatest risk today. It's anesthesiology, no question about it. The reason for that really basically is due to the problem of .....

SCHANKE: I have a cup, Mike, if you want to.....

DR. DeBAKEY: The depressing effects of pharmacologic.....  
they have to use and secondly, the unknown effects  
of these pharmacologic .....upon the cardiac  
mechanism. You just can't always predict it,  
and when it occurs sometimes it's too late.  
So it's the biggest threat of all. Secondly, this  
I think is important, the quality of people in  
anesthesiology is not the highest.

SCHANKE: The second biggest threat....

DR. DeBAKEY: That's the second biggest threat. No question  
about it. Generally speaking they come from a  
lower elements of the medical profession. Why  
that is, I don't know.

SCHANKE: Does it look like an easier trade to them?

DR. DeBAKEY: I'm not so sure what the elements are, but you  
know, you've got to keep in mind that the anesthesio-  
logist sits there for a couple of hours sometimes,  
two or three hours, and while he ought to be very  
alert to all the things, he gets pretty bored with

DR. DeBAKEY:     what he does and he's not excited or stimulated. As a consequence being not alert to what's going on, he doesn't pick up things quickly enough, and things happen. You watch me up there, I'm constantly calling their attention to what they ought to be doing. Constantly. I have no confidence in them. Why, this actually happened-----I was working and, as I do constantly, because I'm.... I've got this built in alertness about them, so I'm constantly checking on them, and I looked over and this girl who was giving the anesthesia was against the wall. She had backed over to the wall and gone and leaned over and gone to sleep, just like this. Sound asleep. Isn't that amazing? Another occasion one of the....this poor fella, finally I think committed suicide, but we never were sure, he died and they found him I think 36 or 48 hours afterward, in his room dead, and they think, nobody knows because they didn't want to know, but most of us suspect he just took enough to kill himself. He was giving

DR. DeBAKEY: an anesthetic for me and I again was alert to the fact, and I looked down and I noticed the blood was very dark and I said something about the blood being dark and he was just standing there kind of in a daze looking at me and he said I don't know why the machine is working fine. So I looked over at the machine and I happened to notice a tube was not connected to the in trachea tube, it was lying down there, and I looked down at it and I said, my God, no wonder, look where the tube is. How long had it been down there? Well, he said it must have just fallen, and he quickly picked it up and put it back. But the patient never woke up. He died.

SCHANKE: I think that one happened the first time I came down here last year, didn't it?

DR. DeBAKEY: Oh, I tell you. And I can give you example after example of patients they've killed simply because of negligence on their part.

SGHANCHE: Do you suppose that's why the suicide rate is higher among anesthesiologists? I believe it is, I just saw it somewhere.

DR. DeBAKEY: Well, I don't know. Whether that's the reason, I don't know. There's just, this is sort of the facts of life and you have to deal with them. It's just like having one of your assistants kill a patient for you. Every single one of the men who are working with me up there were assistants of mine, residents and assistants and trained with me, every single one of them I can cite you a case that they killed. Technical errors. Some of them more than one patient. It's pure technical errors. Now these are things you have to accept and I get a kind of reputation of being a terrible person in the operating room by in a sense chastising them pretty severely about what may be recorded as minor problems, but I regard this as important to point out. In other words, I think that one has to point out these errors and you have

DR. DeBAKEY: to do it emphatically. If you were lying on that table, you would want that....you would want them to be extremely careful with you and if they did any....made any errors that were fatal, you'd be pretty upset about them. Therefore, it upsets me for the same reason. If you're going to be a surgeon then you have to be a responsible surgeon. And if you're going to be a responsible surgeon, you have to recognize that even a minor error can lead to a major error which in turn can lead to a fatality, and there is only one way to prevent it and that's not to let it occur. Now I grant you we're all human and we're subject to the human frailties, so that they will occur for that reasons and experience has demonstrated it. I like to believe that they shouldn't occur in the future even though I recognize that they probably will, but I think that unless you make a strenuous effort to prevent them, you're not going to reduce the errors to a minimal level.



DR. DeBAKEY: So that's why I make such a great fuss about it, and I don't hesitate to speak up in pretty strong language when it occurs.

SCHANKE: I've seen you in action. Well, there are other things beyond anesthesiology ....new drugs for example, anticoagulants.

DR. DeBAKEY: Yes, well, you see, anticoagulants in the development of safe anticoagulants and a safe method of quickly counteracting the anticoagulant made it possible really to do open heart surgery. You couldn't use the heart-lung machine if you didn't have anticoagulants. It is true that anticoagulants preceded the application of the heart-lung machine, it almost had to. But if it hadn't then it had to be developed before it could be used.

SCHANKE: What other developments were there making the situation.....

DR. DeBAKEY: Well, blood transfusions and antibiotics, because this opening up the whole field like this in surgery made it over a long period of time, having a patient on a

DR. DeBAKEY: pump, for example, two or three, four hours.  
This increases the chances of infection tremendously.  
So to be able to control it is very important.  
And antibiotics nearly wiped it out.

SCHANKE: Was it necessary to have advances in surgical  
technique, too?

DR. DeBAKEY: I don't think so. Advances, when you say advances  
in surgical technique, it was necessary to perfect  
these techniques and to perfect the instruments and  
the grafts and that sort of thing, yes. You had to ,  
these had to be perfected. But, the techniques  
themselves were pretty well known. How to sew  
an artery is well known. As I said this technically  
and experimentally was known 1890 era.

SCHANKE: The surgeon did not have to learn how to do anything  
new with his hands?

DR. DeBAKEY: No.

SCHANKE: How long was it after you performed the first resection  
and graft, the homograft , of an aneurysm, before the  
operation became, not routine, but accepted and adopted?

DR. DeBAKEY: Oh, it was some time. I'll show you articles in ...that came out shortly after that against it.

SCHANKE: What would they say?

DR. DeBAKEY: Well, they'd say it's unnecessary, they produce all kinds of complications, there are other ways of treating them, some of the patients don't need them, they live just as long and die later of heart attacks. Strokes, the same way with strokes, carotid artery surgery.

SCHANKE: When did you do the first carotid?

DR. DeBAKEY: In 1954.

SCHANKE: That was a very controversial .....operation.

DR. DeBAKEY: Oh, yes, very.

SCHANKE: And still is to a degree, isn't it?

DR. DeBAKEY: No, I don't think it's very controversial now. I remember even more controversial when I advised it to be done prophylactically. Now it's accepted all over. I tell you this fella Baker from Minnesota came down here for a medical meeting, he was one of my worst critics. He was almost

DR. DeBAKEY: contemptuous in his criticisms. Not long ago he came down here and publicly stated that DeBakey was one of the great pioneers in this field and wanted to pay tribute to him since he was in Houston. He changed completely. Oh, I used to....I went to a neurological meeting ready to participate in a stroke symposium and I was defending myself the whole time I was there.

SCHANCHE: What period was this? The late '50's?

DR. DeBAKEY: Yeah. Around '58 or '59.

SCHANCHE: How many had you done by then?

DR. DeBAKEY: Oh, I had done about 350.

SCHANCHE: What was the record?

DR. DeBAKEY: Excellent. Ninety-five, ninety-six percent success. Well, they would insinuate they didn't believe it. This was a typical criticism that they would use. You can't believe DeBakey.

SCHANCHE: Was there a feeling that the patient was going on, having small strokes or something and you just

SCHANKE: weren't aware of it? Or what, what was.....

DR. DeBAKEY: Yeah, one thing....one of the great criticisms was, well, you don't....you're not a neurologist and you're not neurologically worked up. But one of the great neurologists, leading neurologist, is a fella by the name of Clark Millikin. He was among those who was a little skeptical. But we got on together and became good friends, and so one day I was with him at a meeting and I said, Clark, I see where you're planning to be down at this meeting in Dallas and I've got to be there, why don't you come down while you're there and come with me to Houston and I.... actually see some of the work we're doing on carotid arteries....in surgery. I'd like to have you come in the operating room and see it. Well, he said, I think I'll do that. So, he came down and I brought him in the operating room, made him scrub up and stay in there and even hold the retractors, and see. He was absolutely

DR. DeBAKEY: fascinated with what I was doing and he said this is really interesting. Mike, you know, I'd like to have a group of people from another clinic come down here and see this. Including some of the surgeons. And I said, sure, I'd love to have them come. So, about five of them came down, spent three or four days with me. Six months later in a bulleting of what they call the Proceedings of the Mayo Clinic, they had the whole bulleting was issued on this subject. They had gone back and immediately got a whole series of patients, they operated on them and then reported this in their bulletin, six months later. Isn't that interesting? Of course, that put the stamp of approval on it, when the Mayo Clinic started doing it. But that's true of almost every single kind of development that I made, when we got on dissecting aneurysms, we initiated and in a sense I started the whole concept of operating on dissecting aneurysms which is a very lethal disease.

DR. DeBAKEY: You'll see it in the article. Dissecting aneurysm was where there is an acute dissection separation of the wall of the aorta, and nobody knows the exact cause of this. Often happens in young people. Well, I would say seventy five percent of these patients die within the first twenty four hours to a week, from this acute dissection. There was never, up until I developed this operation for it, that there was an effective treatment. So we wrote up the first series of patients treated successfully, and we had about a success rate something on the order of maybe seventy five percent. We....the criticism to that were really quite extensive. Even as late as four or five, six years later there were those who said, well, they couldn't get those results when the mortality was so much higher in operating. But they'd given it up and a few surgeons joined them. Of course, there are surgeons, you know, who are just technically inept and unfortunately many of these are professors. They're great, what we call, arm-chair surgeons. You know, they read a lot and

DR. DeBAKEY: write a lot, because they don't have anything else to do. They don't have any surgery to do. Because nobody will refer them a case once they find out how inept they are. Of course, this is very important about surgery and people tend to not realize that surgery can be done in an average manner and you can get away with it because the nature of, human nature and animal tissue and so on is such that healing takes place.....you cut yourself, you don't need a surgeon, it'll heal. It'll heal because this is the nature of the reaction of tissue to injury. We couldn't survive otherwise. That's why we've come where we have over the few million years I guess that we've been here. In ....The body can take a lot of trauma and compensate for it. Well, obviously there is a point at which compensation breaks down, it can't compensate and the patient dies or there is a breakdown in the wound. So that the surgical technique becomes quite important and in vascular sur----cardiovascular surgery even more important. There you are dealing



DR. DeBAKEY: with very precise factors, whereas, to illustrate the point, if you put in sutures in doing an intestinal anastomosis, if you get a little leakage, that'll seal over very quickly or the most that might happen is that you might get a little abscess which would need to be drained, but when you're sewing a vessel, an artery, and you get a leakage the patient can die from internal hemorrhage.

There is no compensation for that. So that the technique becomes extremely important and the manner of execution is important in effecting results and applying more complicated procedures. You take, for example, the techniques of coronary artery surgery. If this isn't done precisely and carefully and so on, it can be a failure. Now the success rate is often dependent on how well it's done. So that a success rate of ninth percent in the hands of .....

(PHONE)

DR. DeBAKEY: .....that's being a good doctor....get a call....  
Oh, boy....I get so damned disgusted with them.  
They want all the benefits of being a doctor, but  
they don't want to make a sacrifice.

SCHANKE: Back to what you were discussing.....you  
started the search for artificial material in the  
very early fifties, didn't you? Before you actually  
did your first aneurysms, when you were just getting  
your research on homografts.

DR. DeBAKEY: Yeah, that's right. Well, you see, I never was  
very happy with homografts, although they worked.  
It became increasingly apparent to me that these  
were nothing but artificial arteries. At first the  
concept was that they were living tissue and that  
they would grow. Well, we proved that that wasn't  
true. Once we proved....I suspected that it wasn't  
true because I just couldn't believe how they could  
survive. Once we were able to prove it wasn't  
true, then I knew I was convinced then that these  
were artificial arteries we were dealing with.

SCHANCHE: They were doing essentially the same thing that an artificial artery does?

DR. DeBAKEY: Yeah, it's just a conduit. So that's when I felt that we must find a good substitute, from substitute materials that you can manufacture because relying on dead tissue meant that you were compromising all the time in using this. You had to use what you had available for the patient, not what the patient needed. If the graft was too small or too large for the individual, that's what you had to do, this was a compromise. Secondly, you had to rely on dead people to get what you wanted. Only certain arteries were available. We tried all kinds of animal arteries and they just didn't work, because they produced a reaction, the tissue destroyed them and rejected them.

SCHANCHE: With the dead tissue, didn't it tend to give way at times?

DR. DeBAKEY: That's right, it would break down.

DR. DeBAKEY: I remember we were talking about using the zebra arteries, how in the neck the carotid artery of the zebra is huge and you could use many segments of it. So that's when we began searching for substitutes. We experimented.

SCHANKE: Zebra or a giraffe?

DR. DeBAKEY: I mean a giraffe. So once the concepts were validated that these were artificial arteries that we were using then it was very easy to go from there on looking for some other substitute. That's what gave us the idea of a search for substitutes.

SCHANKE: How about the coronary bypass?

DR. DeBAKEY: Well the coronary bypass, one of the difficulties with artificial arteries is that if the flow through that artery is not strong then the blood slows down and lays on the surface layer after layer of thrombus. This ultimately slows it down more. The more it slows down the more layers, so you get a vicious cycle and it finally blocks it up. If you're using too small an artery it won't work. It works only

DR. DeBAKEY: in a larger artery, because the flow is so great it acts as a kind of a stint and washes away these layers, until, giving the tissues time to develop an inner lining which then doesn't let this stuff.....then if it slows down, it's alright. Then it can...it'll still not clot. So that's why we use veins for these coronary arteries, because the flow through there is a small amount, you know, fifty, seventy-five, hundred cc's per minute.

SCHANKE: Well, who developed the coronary bypass?

DR. DeBAKEY: Well, we did the first one.

SCHANKE: I thought you did.

DR. DeBAKEY: As a matter of fact we just sent in a report that we hope will be published in JAMA on the first successful case which is still living and still functioning. We've demonstrated with arteriogram, eight years.

SCHANKE: Now your doing .....it is still a controversial operation?

DR. DeBAKEY: Yes. It will remain that way for four or five years.

DR. DeBAKEY: Then the critics will have to give up.

SCHANKE: On what grounds are they criticizing that they are not getting the same results you're getting?

DR. DeBAKEY: The same old grounds. That all of these things were criticized. There is a certain element of skeptics and a certain element of reactionaries who just cannot stand to see us make an advance and the reason is that they believe what they are doing is alright and anything different is bound to be wrong. Subconsciously, they won't go through the consciousness of it, it's just their makeup. You've got to remember that doctors are like their people, they are no different from you are anybody else, they're people. If you take the spectrum of people, you'll find that there are those who want to really go back to the good old days. Like this story they tell about the reporter who was down in Mississippi in the early days when they were marching, civil marching and so on and he was trying to give a little idea of what the people thought down there and he was

DR. DeBAKEY: sort of inquiring reporter and he'd stop people on the street and ask them what they thought. He asked this fella what he thought about integration, and he said he was agin it. He said well, what do you think about segregation? And he said I'm against that too. He said, well, what are you for? He said, slavery. Well, you've got people who really want to return to the good old days, they are the reactionaries. They are the .....there are those who want to keep it like it is, don't shake the boat. Status quo. Then you've got this middle group that will go along with the crowd if they're pushed, and then you've got those who are advancing, they want to advance. And of course, the radical elements like the reactionaries always at the extremes. Doctors are the same way. They're like this spectrum of people. Why? Well, they come from the people. If you're really going to think about it, you can't expect them to be any different. The fact that you educate a

DR. DeBAKEY: person doesn't make him by his very nature, much different. You put a veneer on him in educating him.

SCHANKE: Teddy Roosevelt said he would steal box car instead of the rope that broke.

DR. DeBAKEY: Yeah, that's right. That is the basic characterization and so you have these skeptics and they are like, you know you have in that group, the ....those who are vocalizing, just like you have in other areas of life. You've got these....like these protestors, they are vocalizing. They may be in the minority, but they're vocalized strong enough to make you think that they're exaggerating their importance. Sometimes this is effective, I don't mean to be critical of it's usefulness, but this is what happens in medicine. While I was being criticized by some of these people, that, sort of their colleagues right next door to them, were sending me their patients. As they used to say, where does he get all these patients.



DR. DeBAKEY: We don't see all of this. I used to say, when I'd be in New York, I get some of them from New York. How do you get all... what kind of population do you have in Texas that you get all these aneurysms? And all these carotid arteries and so on. I said, well, they're not Texans. They come from every state in the Union.

SCHANKE: In all of these cases, is there always a feeling of apprehension and .....full of apprehension when you do the first one? When you did the first coronary .....

DR. DeBAKEY: Yes, oh, yes. Definitely.

SCHANKE: How did you feel about that one? I mean, that wasn't too long ago.

DR. DeBAKEY: Well, when I say apprehension, let me say, I'm apprehensive about whether or not it's successful. Not apprehensive about doing it.

SCHANKE: About whether you can do it.....

DR. DeBAKEY: About whether I can do it, because there I, and

DR. DeBAKEY: I don't mean this in any braggin sense, but after you have a certain amount of experience as I have in a sense in whatever I do , I've had this all my life, going back to my early days, I have developed a certain confidence in what I can do. No matter what it is. I'm apprehensive about whether it's successful or not, but not about doing it. This was true in all the things that I did. I know, I'm not nervous. Once I start doing something, I feel confidence in myself in being able to do it. What I'm nervous about is whether or not it will be successful. This is to some extent is true in every case I do, whether it's the first one or whether it's ....the ones I did today, you know, I...right there, while I'm talking with you right now we've got a kidney transplant going on upstairs. I'm a little apprehensive about that and I'm going to have to drop out in a minute to go check on it. Largely because I know in having the numbers of

DR. DeBAKEY: people that must be involved in doing these kinds of things, I've had enough experience to know that it can....that there is a weak link that can break the whole chain. And I'm nervous about having to make sure and checking on all of these people and on what they're doing and so on.

SCHANKE: There's something I want to ask you about that, do you go through a strategy in planning such.....

DR. DeBAKEY: Well, yes, for the first case , for example, when I did the first valve case, when I did the first aneurysm case and so on, I went through what I was going to do with the nurses and with my assistants and the team and we discussed the procedures stepwise and so I knew what I was going to do, but I had already .....

SCHANKE: You had already sat down and plotted this?

DR. DeBAKEY: Yes. That's right. Oh, yes.

SCHANKE: Then do you actually dry run it?

DR. DeBAKEY: Sometimes. To some extent by checking out everything. But not necessarily by dry running it stepwise.

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DR. DeBAKEY: Then you see we made movies of many of these things and I'd sit down and look at the movies and review them and sometimes look at them several times to sort of make sure whether these steps and ideas were right steps, how would I do it again and so on. To perfect it. That's why we have so many movies. We have the largest collection of movies in cardiovascular surgery in the world.

(PHONE)